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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Siani Lynne PEARSON ) RE: Claim to Priority )
Serial No.: 10/817,333 ) Group: unknown )
Filed: April 2, 2004 ) Examiner: unknown )

For: "A METHOD OF PURCHASING ) Our Ref: B-5413 621817-2 INSURANCE OR VALIDATING AN )
ANONYMOUS TRANSACTION" ) Date: March 15, 2005

#### CLAIM TO PRIORITY UNDER 35 U.S.C. 119

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

[X] Applicants hereby make a right of priority claim under 35 U.S.C. 119 for the benefit of the filing date(s) of the following corresponding foreign application(s):

COUNTRY FILING DATE SERIAL NUMBER
UK 5 April 2003 0307906.8

- [ ] A certified copy of each of the above-noted patent applications was filed in the Parent U.S. Application No.
- [X] To support applicant's claim, a certified copy of the above-identified foreign patent application is enclosed herewith.
- [ ] The priority documents will be forwarded to the Patent Office when required or prior to issuance.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first-class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450", on March 15, 2005 by Katherine Nieva.

Kather Min

Respectfully submitted,

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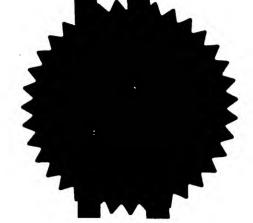
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07APR03 E798120-1 D0146 P01/7700-0:00-0307906.8

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Cardiff Road Newport South Wales NP10 8QQ

Your reference

300201526-1 GB

Patent application number (The Patent Office will fill in this part)

0307906.8

**0 5** APR 2003

Full name, address and postcode of the or of each applicant (underline all surnames)

Hewlett-Packard Development Company, L.P. 20555 S.H. 249 Houston, TX 77070

**USA** 

Patents ADP number (if you know it)

8557886001

If the applicant is a corporate body, give the country/state of its incorporation

Texas - USA al sopin 03

Title of the invention

A Method of Purchasing Insurance or Validating an Anonymous Transaction

Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

Bruce G R Jones Hewlett-Packard Ltd, IP Section Filton Road, Stoke Gifford Bristol BS34 8QZ

R63083001

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6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number :

Country

Priority application number (if you know it)

Date of filing (day / month / year)

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8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer Yes' tf:

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b) there is an inventor who is not named as an applicant, or

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300201526-1 GB

### ANONYMOUS TRANSACTION

The present invention relates to a method of purchasing insurance or validating an anonymous transaction, such that an individual's privacy is respected and yet they can still effectively conduct transactions where personal information is required.

Presently when a person applies for insurance (for example life assurance, health insurance, motor insurance, holiday insurance) they fill in a form which reveals their true identity and which also discloses other information which the insurer deems necessary.

Suppose that an individual wishes to obtain health insurance. Health insurance companies seek a fairly detailed inspection of an individual's medical history before issuing a quote. Furthermore the quotes issued may vary significantly from insurer to insurer.

It is well known that insurance brokers make their business by comparing the quotes of many insurance companies and then offering their client the best or a list of the best policies.

Such services are now available over the Internet. The individual may log on to a server of a broker and may be required to fill out a form detailing personal information to enable a quote to be derived. Figure 1 shows a table where the questions asked and our hypothetical individual's responses are summarised.

The questions, for example questions 3 and 4 relating to name and address, seek information that is sufficient to uniquely identify the individual. Other questions probe the medical history of the individual and may relate to data that the individual would not want known to others. Thus, for example, question 25 asks a specific question about treatment of a specific disease X. Disease X may be a disease that carries a social stigma or a real and continuing risk to the health of the individual or others close to that person. In order to get valid insurance an individual has to disclose the existence of disease X. However, they may be reluctant to do this since the form also contains information to uniquely identify them.

Following completion of the form, the broker's computer then contacts other computers

Thus the individual has lost control over his personal information and has no idea where it has been sent, or what processing is being performed on that information.

owned or run by insurers and sends the results of the questionnaire to them.

According to a first aspect of the present invention there is provided a method of purchasing insurance comprising the steps of: forming a pseudonymous identity that is associated with data pertaining to a first entity such that for a given insurance type sufficient information is given to an insurer for the insurer to assess a level of risk for pricing or issuing insurance; making the pseudonymous identity and associated data or an assertion relating to certain conditions being met available to an insurer; and entering into a contract of insurance with the insurer based on that information provided such that the real identity of the first entity remains unknown to the insurer.

It is thus possible for a purchaser of insurance to validly transact with an insurance company such that their privacy is respected, and such that information is released on a 'need to know' basis only. This prevents the purchaser's identity and confidential information being released outside the circumstances of the purchaser actually making a claim. The pseudonymous identity could merely be the creation of a false "name" for the user/entity wishing to purchase insurance. The false name could be a normal human name, e.g. John Smith, but in a preferred embodiment the pseudonymous identity is a computer generated character string or similar, ie an identification key.

Preferably the pseudonymous identity reveals or is associated with selected attributes (or facts or descriptors) concerning the first entity. Advantageously the first entity is a user of the method but this is not necessarily the case. Thus one person could seek to enter an insurance contract on behalf of another person, for example when a parent or guardian seeks insurance for or on behalf of a child who may be too young to have legal capacity to contract on their own behalf.

Preferably certain attributes (facts or data) relating to the first entity remain undisclosed to the insurer. This preserves the privacy of the first entity. Otherwise it might be possible for an insurer to correlate sufficient attributes relating to the first entity to identify it. Thus



the data which is associated with the pseudonymous identity could be the user or first entity's real data, or more likely a sub-selection from it. However, as will be described later it is preferred that this data is processed such that it becomes a more general description of the user of first entity.

It is thus possible to provide an arrangement in which selected hidden attributes such as the user's real identity may remain unknown to the insurer until such time as the user needs to make a claim on the insurance, or may always remain known only to trusted third parties.

A trusted third party could validate information needed for satisfaction of the policy by vouching that the applicant satisfies various hidden criteria (criteria not disclosed to the insurer) for insurance (which could be generalised to heighten the degree of anonymity of the user), or did satisfy them at the time of application. This could be ascertained via the trusted third party sending an assertion about certain conditions being met relating to the user of the pseudonymous identity so that the insurer could check that this would meet the policy conditions, or else by the insurer sending the third party the policy conditions and the trusted third party merely indicating that these conditions were met, without giving details necessarily as to how they were met. Thus the trusted third patty acts as a policy examination agent. Such assertions could be in the form of certificates signed by the trusted third party associating the applicant's pseudonymous identity with such information. Alternatively, a platform owner could self-certify such information based on a user's identity and attributes of that user, although the insurer is unlikely to regard selfcertification as adequately trustworthy unless the user is considered to be trustworthy source, such as a known enterprise. Preferably, the trusted parts of the computer platform would act as roots of trust in this certification process, as considered further below.

The pseudonymous identity may be merely an identification key generated by the user or by their computer. The identity may be comprised of/or associated with information held within a trusted computer (also known as a trusted computing platform). It is not necessary to use TCPA identities to implement the invention, although the use of TCPA identities is a preferred method of implementation.

The first identity/user may create a pseudonymous identity for each transaction if they so wish. Each identity may be associated with different facts about the real user and these

facts about the user vary depending upon the nature of the insurance policy. Thus some information about the user may be accurately given to the insurer, some information may be withheld and some information may be generalised. Thus some of the user's real data is hidden or omitted during the construction of the attribute base associated with the pseudonymous identity.

Trusted Computing Platforms are defined in the specification published via www.trustedcomputing.org. Such a trusted computing platform may be, for example, of the type described in WO00/48063. Thus the computing platform may contain several trusted compartments which may operate at different levels of trust. The trusted compartments isolate the processes running within the compartment from processes in other compartments. They also control access of the processes or applications running therein to platform resources. Trusted compartments have additional properties in that they are able to record and provide proof of the execution of a process and also provide privacy controls for checking that the data is being used only for permitted purposes and/or is not being interrogated by other processes.

The "walls" of compartments may be defined by dedicated hardware or be defined in software.

Trusted computing platform (TCP) architectures are based around the provision of a trusted component which is tamper resistant or tamper evident and whose internal processes cannot be subverted. A TCP preferably includes a hardware trusted component which allows an integrity metric (ie. a summary of an integrity measurement) of the platform to be calculated and made available for interrogation. It is this device which underpins the integrity of a TCP. The trusted component can help audit the build of the platform's operating system and other applications such that a user or operator can challenge the platform to verify that it is operating correctly.

Co-pending applications, such as GB 0118455.5 entitled "Audit Privacy" by Hewlett Packard disclose that it is possible to provide an audit process that can verify that a process can be run on a trusted computing platform, that access by the operator or owner of the trusted computing platform to the processes is inhibited, and that access to the audit information is restricted.

In a preferred implementation the audit process exists within a trusted component thereby ensuring that its operation cannot be subverted. The results of the audit are generally stored in protected or encrypted form in memory within a trusted computing platform. The audit data is itself partitioned into sets such that investigation of audit data in one set does not disclose the data in other ones of the audit sets. The trusted component may make an assessment of one or more computing platforms which request the audit data. If the platform is on an unknown or untrusted type, and/or has unapproved means for viewing the audit data, then the data may be withheld.

It is advantageous to propagate private information through a computer platform or system or network, to take advantage of resources and services. Trusted computing platforms, of the type described previously, for example, may provide a safe processing environment for private information provided that the owner of the private data retains control over the private information.

The provision of a trusted component means that the user can have one or more trusted pseudonymous identities. The identities are trusted because the trusted computing architecture enables a trusted third party, i.e. a certification authority (CA) to confirm the trustworthiness of the trusted component. The certification authority can interrogate the trusted component and can validate the identity of the trusted component. The trusted component can then validate pseudonymous identities associated with it. TCPA provides a particular protocol for generating TCPA identities, as is described in the TCPA Specification v1.1 (downloadable via www.trustedcomputing.org). This protocol involves the owner (who is not necessarily the user!), the trusted component and a trusted third party (a privacy CA chosen by the owner).

Thus it becomes possible to provide the insurer (or indeed any other service provider which can deal with an anonymous or pseudonymous client) with some way of performing authentication that the pseudonymous identity with which it transacts or communicates relates to a specific real world entity, such as a company or individual. Indeed, it may also provide a way of enabling the real world identity of the customer to be made available to the insurer provided that certain conditions are satisfied. These conditions may be determined, at least in part, by the customer of the insurance company.

The insurance company may provide or stipulate a procedure for rendering a user's data generalised or generic.

If the user is satisfied that their information can be rendered pseudonymous or generalised automatically then the user may permit an agent to receive their real data and to process it such that the real user's attributes are anonymised and the real user is given a pseudonymous identity. The agent could be a privacy agent executing on the user's own computing device. Additionally or alternatively a privacy agent, an pseudonymising agent or an agent for generalising the data may execute on a third party computing device. A user may choose to restrict the use of such agents unless the user can receive a validation that the information will be processed in an environment where it will be transported in a secure manner and will not be made available for other purposes. Such assurances can be provided by the use computers in conformity with the TCP architectures and utilising the concept of compartments with audit privacy as discussed hereinbefore.

It is advantageous that the process of adding a pseudonymous identity in place of a user's real identity should also withhold or generalise some of the user's information, otherwise the combination of data may be sufficiently specific to identify the real person to which the pseudonymous identity relates.

Thus if a user is, for example, 43 years old the procedure for rendering the data generalised may place the age into an age range. Thus one range may be 40 to 45. The procedure for rendering the user data generalised (or otherwise anonymising it) may provide for differing levels of anonymity and a higher level of anonymity may have a higher cost penalty associated with it to reflect the fact that the insurer may be covering a greater unquantified risk.

Similarly dissimilar groups having similar risks may be clumped together such that the user can either identify himself by reference to the group as a whole or may, as part of his pseudonymous identity, define that he belongs to an equivalent member within the group. Thus, if for insurance purposes Bristol, England and Southampton, England were places categorised in group A for risk assessment for a particular kind of insurance, then validly a person living in Bristol could either indicate that they lived in Bristol, in Southampton or a place in group A. The level of risk for all of these options is defined as being equivalent and hence any would allow the insurer to quote whilst allowing the customer to retain their privacy.

Alternatively a trusted third party, in this case a transaction agent, could accept the customer's real data on the condition that it would not disclose it. The trusted third

party/transaction agent could then run a quote procedure and offer a quote. If the customer chooses to accept the quote then the transaction agent issues the policy and informs the insurer that it has done so. The insurer may be provided with the pseudonymous identity of the customer thereby allowing it to communicate with this customer, but remains blind to the real world identity of the customer.

According to a second aspect of the present invention there is provided a method of conducting an anonymous transaction comprising the steps of formulating a pseudonymous identity based on a customer's real identity where the pseudonymous identity is associated with data generated in accordance with a customer's security policy either alone or in combination with rules provided by a transaction agent used by the party with which the customer is seeking to conduct a transaction, and wherein the transaction is performed electronically using a trusted computer and an identifier is provided by a trusted component of the trusted computer and the identifier can be used to confirm a relationship between the pseudonymous identity and the customer's identity in the event that the customer needs to disclose his identity to the other party in the transaction.

This enables the insurer to communicate with the user/individual to seek further information or to issue the policy.

The insurance policy is associated with the pseudonymous user identity and is negotiated and agreed with reference to selected attributes only. Optionally, the negotiation process involves the user's agreement to reveal more attributes (ie data about themselves). Optionally, the user will reveal a level or class of attributes, dependent upon the software state of the insurer (checked using TCPA integrity checking), that the user might not normally wish to reveal.

Payments may be accepted by an anonymised payment procedure with reference being made to the policy number and/or the pseudonymous identity.

According to a third aspect of the present invention, there is provided a method of anonymising data comprising the steps of mapping a user's real data into groups covering ranges of the said real data, and adding a pseudonymous identifier to the mapped data.

In a preferred embodiment the invention is implemented using a combination of agent technology and TCPA. Agents can be located on the client platform and the insurance platform, and possibly also on intermediary platforms or on trusted third parties. Preferably, the agents are integrity checked using an extension of the TCPA boot process

and the TPM can vouch for (sign) the generalised attributes, or the complete policy that is sent out. The agents control exactly what attributes are released. Attributes can be gathered via the TPM and/or stored using the TCPA 'protected storage' functionality. Optionally, attributes can be associated with the platform's software environment (using TCPA 'protected storage' functionality) such that the attribute information will not be released unless the platform is in approved state (to protect secrets in a hacked environment).

The present invention will further be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 schematically illustrates the sort of data sought by an insurer to issue an insurance policy;

Figure 2 schematically illustrates the processes involved for anonymising data;

Figure 3 schematically illustrates options provided within a policy agent;

Figure 4 schematically illustrates an association between a user's personal data and their privacy controls; and

Figure 5 illustrates a computer network suitable for carrying out a transaction in accordance with an embodiment of the present invention.

As shown in Figure 2, before seeking to engage in an insurance transaction a user needs to acquire a copy of an appropriate policy agent, at step 30. The policy agent provides a trusted procedure for converting an individual's real data into an anonymised set of data. It will be appreciated that different insurers ask different questions, and indeed the questions relating to different types of insurance also differ.

Figure 3 illustrates a policy agent for motor insurance together with mapping options depending on security/privacy options set as part of the privacy policy of the user.

The user may have pre-entered much of the commonly requested data and privacy policy statements relating to that data. Thus, as shown in Figure 4, a user can enter specific types of data, such as age, gender, address in data fields 1 to 3, labelled 51 to 53 respectively, together with associated security controls 51a to 53a, respectively. The security controls

enforce a user's privacy policy. The security controls may be simple settings, such as High (H), medium (M) and low (L) as shown in Figure 3. However they may also be more complex, and may for example implement rules which may determine the level of security/privacy to be applied based on conditions such as the nature of the questions asked or external considerations such as the level of security provided in the data transmission channel or the security features of the computing device which is requesting the information in order to process the insurance policy request.

Returning to Figure 3, the policy agent may seek information concerning an individual's age. In this example the policy agent allows for 3 levels of mapping to render the data anonymised. It is appreciated that other (more or fewer) levels of mapping could be applied.

The highest privacy mapping H assigns the user's age into age ranges each spanning ten years. The intermediate privacy mapping M assigns the user's age into ranges each spanning 5 years, whereas the lowest privacy mapping L assigns the user's age into groups each spanning 2 years.

Similarly with regards to the second question requiring an indication of gender, the user can either set their security/privacy policy such that this information is withheld or it is disclosed.

The third question in the example shown in Figure 3 relates to whether the user has received any tickets or convictions for speeding in the last three years. The policy agent in this example gives the user the option not to disclose this information in a high privacy option, to disclose the data in ranges in a medium privacy option or to disclose the actual number in a low privacy option.

Each of these choices in the example of Figure 3 varies the amount of data collected by the policy agent and made available to the insurer. The insurer will naturally base the quote or insurance offer on the basis of the information available to them and hence a desire for privacy may incur a financial penalty to the user.

Returning to Figure 2, the policy agent after having collected the user's real data (either from direct entry, stored data or both) maps the data in accordance with the user's security

policies at step 34 and then adds a pseudonymous identity at step 36 before communicating with the insurer at step 38. Thus the pseudonymous identity is associated with generalised data. This prevents data mining techniques being used to identify the real world identity behind the pseudonymous identity.

The pseudonymous identity may be created by the user, or be created automatically. The user may use this identity each time he or she wishes to communicate with the insurance company. This amounts to self certifying ones own identity and has a risk that third parties could maliciously assume that identity. A user could certify his own identity, but whether anyone else trusted that identity would depend upon whether they trusted the user because people won't trust an identity unless they trust the certifying authority. In instances where the user has a trusted computing device the ability of the TCP to generate trusted computing platform architecture (TCPA) identities can be invoked. Reference can be made to the TCPA specification published at www.trustedcomputing.org.

The trusted component (often called a trusted computing module, TPM) has control over multiple pseudonymous attestation identities. An attestation identity does not contain any owner or user related information. It is solely a platform identity used to attest to platform properties, and a TPM only uses the attestation identities to prove to a third party that it is a genuine TCPA conforment TPM.

Each attestation identity is created on the TPM with attestation from a certification authority chosen by the platform owner. Each attestation identity has a randomly generated asymmetric cryptographic key and an arbitrary textural string used as an identifier for the pseudonym - which is chosen by the owner/user of the trusted computing device. To obtain attestation from the certification authority, the trusted computing device sends the certification authority information that proves the identity was created by a genuine trusted platform. This process relies on the provision of signed certificates from the manufacturer of the TPM and a secret installed in the TPM. The secret is known only to the TPM and is used only under the control of the owner of the platform. In particular, the secret is not divulged to arbitrary third parties, in contrast to attestation identities. The trusted platform owner/user may choose different certification authorities to certify each TPM identity in order to prevent correlation of the identities being performed.

It is thus possible to enable a user to anonymously conduct a transaction with an insurance product.

In fact, it will be appreciated that this process can be extended to many services where physical delivery of an item is not required.

Figure 5 schematically illustrates the interaction between various components engaged in performing an insurance transaction. A user's computer 70 which includes a trusted computing module 72 executes a policy agent 74 so as to format data for submission to an examination agent 76 executing within an insurer's server 78. The data is transmitted via a telecommunication network 80, such as the internet.

The policy agent can either format the data such that items which are not to be disclosed are removed from the data or alternatively these items are masked in such a way that they are not accessible to the insurer without the owner of the data making unmasking information available.

The trusted computing module may store one or more trusted identities 82 which can be associated with a pseudonymous identity chosen by the user. This combination of identities can be made available to a certification authority (a trusted third party) which can check the association between the trusted identities contained within the trusted computing device 72 and the pseudonymous identity. If these identities are correctly associated the certification authority 84 sends a message confirming the validity of the pseudonymous identity - that is it confirms that the pseudonymous identity is correctly allocated to a real identity.

The insurer's computer can then quote for the policy or request more specific information. This can be returned to the user via an anonymising service such as a bulletin board or via a trusted proxy such that the user's e-mail address does not become disclosed. The user may then accept the policy, decline it, or provided further information.

In a variation on the above method, the examination agent may pass its criteria for offering insurance to the trusted third party 84, and the user may make all of his information available to the trusted third party. The trusted third party could then, in effect, act as an agent for the insurer by executing the examination and issuing a policy or quote, and then

confirming to the insurer that it had done this and that the conditions laid out in the examination agent were satisfied and that insurance has been issued on an anonymous basis to the user.

The trusted third party does however contain a list allowing the policy number of the insurance to be uniquely associated with the user.

Only when seeking to make a claim on the insurance does the user need to reveal sufficient information about his true identity to enable the insurer to validate and process the claim and make any appropriate payments.

It is thus possible to provide a method in which the user has a real identity which the user wishes to remain hidden, at least at the time of negotiating the insurance policy. In order to achieve this a user can create a pseudonymous identity which is linked to the user. The pseudonymous identity along with generalised attributes can be sent to an insurer so that they can assess the insurance risk and offer a quote. Alternatively the insurer can send their rules for offering insurance to a third party who assesses whether the user satisfies the requirements, and if so makes a statement to the insurer that the pseudonymous identity relates to a user who meets the insurer's requirements.

#### **CLAIMS**

1. A method of purchasing insurance, comprising the steps of:

for a given insurance type, providing, in data pertaining to a first entity, sufficient information to an insurer or insurance examination agent to enable assessment of a level of risk for pricing or issuing an insurance;

defining a pseudonymous identity associated with the data;

making the pseudonymous identity and associated data or an assertion about certain conditions being met available to an insurer; and

entering into a contract of insurance with the insurer based on that data or assertion such that the details of the first entity remain unknown to the insurer.

- 2. A method as claimed in claim 1, in which, when seeking to claim on the insurance policy, the data pertaining to the first entity are made available to the insurer in order that the insurer can validate that there is an acceptable level of correlation between the pseudonymous identity and the first entity:
- 3. A method as claimed in any one of the preceding claims, in which the transaction is conducted electronically and in which the first entity or the customer submits their information or responses via a trusted computer, and wherein a trusted platform module within the trusted computer generates a user identity which can be used in future to confirm the identity of the first entity or customer.
- 4. A method as claimed in claim 1, in which the first entity enters their data onto a trusted computer together with their policy agent which defines how information relating to the first entity can be disclosed to an insurance examination agent.
- 5. A method as claimed in claim 4, in which the policy agent communicates with an insurance examination agent in order to negotiate and authorise an insurance policy.

- 6. A method as claimed in claim 5, in which the trusted computing platform and a server running the examination agent authenticate with one another such that the policy issued to the first entity via the pseudonymous identity is linked to an identity used in the authentication or to a further identifier provided by the first entity.
- 7. A method as claimed in any one of the preceding claims in which the data pertaining to the first entity is generalised.
- 8. A method as claimed in claim 7, in which the generalised data is generated by a generalising agent acting in accordance with a user's security policy.
- 9. A method of purchasing insurance, comprising the steps of:
- i) an insurer making its conditions for insurance available to a trusted party.
- ii) a customer making its responses to the conditions for insurance available to the trusted party, and
- iii) the trusted party analysing the responses and determining whether insurance can be offered to the customer and if so validating to the insurer that a policy has been issued to the customer and that the customer satisfies the insurer's conditions.
- 10. A method as claimed in claim 9, in which the transaction is conducted electronically and in which the customer submits their information or responses via a trusted computer, and wherein a trusted platform module within the trusted computer generates a user identity which can be used in future to confirm the identity of the customer.
- 11. A method as claimed in claim 9, in which the customer enters their data onto a trusted computer together with their policy agent which defines how information relating to the customer can be disclosed to an insurance examination agent.

12. A method of conducting an anonymous transaction comprising the steps of formulating a generalised identity based on a customer's real identity where the generalised identity is generated in accordance with a customer's security policy either alone or in combination with rules provided by a transaction agent used by party with which the customer is seeking to conduct a transaction, and wherein the transaction is performed electronically using a trusted computer and an identifier is provided by a trusted component of the trusted computer and the identifier can be used to confirm a relationship between the generalised identity and the customer's identity in the event that the customer needs to disclose his identity to the other party in the transaction.

#### 13. A method of purchasing insurance, comprising the steps of

defining a generacised identity containing or associated with user data based on the attributes of a first entity such that for a given insurance type the generacised identity contains sufficient information for an insurer to assess a level of risk for pricing or issuing an insurance;

making the generacised identity available to an insurer; and

entering into a contract of insurance with the insurer based solely on the generacised identity such that the details of the first entity remain unknown to the insurer.

- 14. A method as claimed in claim 13, in which, when seeking to claim on the insurance policy, the details of the first entity are made available to the insurer in order that the insurer can validate that there is an acceptable level of correlation between the generalised identity and the first entity.
- 15. A method as claimed in claim 13, in which a pseudonymous identity is formed based on the generacised identity, the pseudonymous identity including pseudonymous information which can be exchanged with the insurer so that the insurer can validate that it is communicating with the first entity via its pseudonymous identity.

#### **ABSTRACT**

### A METHOD OF PURCHASING INSURANCE OR VALIDATING AN ANONYMOUS TRANSECTION

(Figure 2)

A method purchasing insurance is provided, the method comprising the steps of entering into a contract of insurance with the insurer based solely on the generalised identity (perhaps created for that particular purpose) that is associated with selected policy attributes (possibly generalised to ranges etc.) or statements that the user's attributes satisfy a policy, such that other attributes, including the real identity of the user, remain unknown to the insurer.

### 1/4

Question no.	Question
1	AGE?
2	GENDER?
3	NAME?
4	ADDRESS?
•	
•	
25	HAVE YOU HAD OR DO YOU HAVE DISEASE X

Fig. 1

51 Field 1	Security control 1 51a
Field 2	Security control 2 52a
Field 3	Security control 3 53a

Fig. 4

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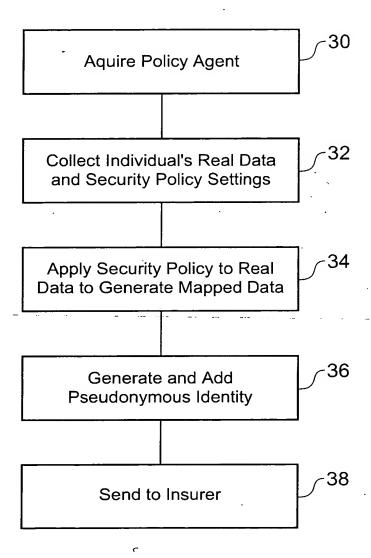


Fig. 2

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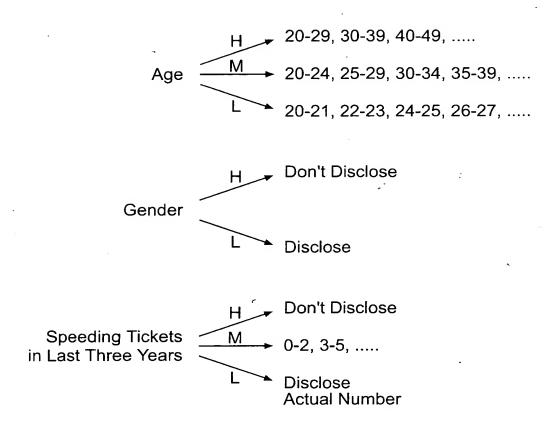


Fig. 3

(OTARU) MNAJB 3DA9 ZIHT

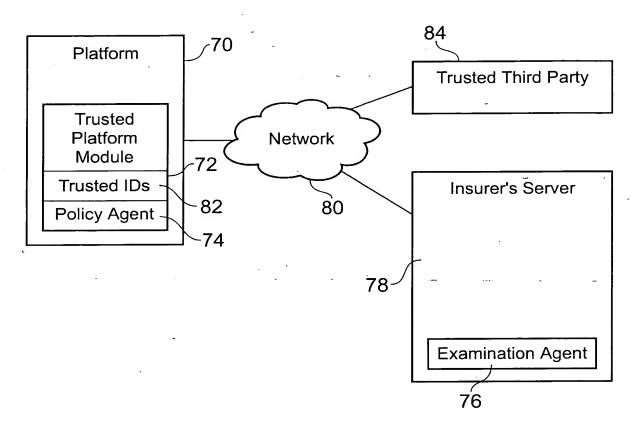


Fig. 5

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